

## REMARKS

Claims 1-35 were previously pending and currently stand rejected. Claims 52-55 are added and are fully supported by the application as originally filed. Therefore, no new matter is added and claims 1-35 and 52-55 are pending. In view of the following remarks, Applicant respectfully requests reconsideration and allowance of all pending claims.

### *Claim Rejections – 35 U.S.C. § 103*

Claims 1-3 stand rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 6,167,169 (hereinafter Brinkman). Applicants respectfully traverse.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (M.P.E.P. § 2143.03 citing *In re Royka*, 490 F.2d 981 (CCPA. 1974)). Further, the proposed modification cannot render the prior art unsatisfactory for its intended purpose (M.P.E.P. § 2143). Applicant respectfully submits that Brinkman fails to teach or suggest all of the claim limitations of the rejected claims. Further, Applicant respectfully submits that the proposed (but unsuggested by the prior art) modification of Brinkman to permanently modify the effective refractive index would render Brinkman unsatisfactory for its intended purpose. For example, claim 1 recites in pertinent part:

A method ..., comprising:

...  
“permanently modifying the effective refractive index of at least a portion of the intracavity waveguide segment.” (emphasis added).

Applicant respectfully asserts that Brinkman in no way teaches or suggests "permanently modifying the effective refractive index ..." as recited in claim 1.

Page 6, section (a) of the Office Action containing a response to Applicant's January 11, 2002 amendment] states that it "is obvious that the invention of Brinkman can retain the modification of the effective refractive index if desired, thereby becoming permanent." Applicants respectfully disagree.

The Office Action recognizes that Brinkman does not teach "permanently modifying the effective refractive index", and instead states that it would be obvious to retain the modification if desired. However, the office action in no way indicates where Brinkman teaches or suggests such permanent modification. Rather, the Office Action appears to create the "permanently modifying" feature using the teachings of the application, which is improper (see MPEP § 2143 citation of *In re Vaeck*). Thus, claim 1 is patentable over Brinkman for at least the reason that Brinkman fails to teach or suggest all of the features of claim 1 (MPEP § 2143.03).

Furthermore, the Office Action does not indicate the suggestion or motivation for the above modification of Brinkman, other than stating that it can be done "if desired". This is improper - the rejection must state how the prior art discloses *the desirability* (see MPEP § 2143.01 "[t]he prior art must suggest the desirability of the claimed invention") rather than make the conclusion that the modification is possible if desired. Thus, claim 1 is patentable over Brinkman because the Office Action fails to provide a suggestion or motivation for the proposed modification.

Still further, paragraph 5 of the Office Action cites "col. 2, line 37 through col. 4, line 3 and all throughout the document" as teaching the claimed invention. This cited text is directed to "light sources coupled with waveguide structures for

display applications" (col. 2, lines 19-21). In addition, the cited text describes the problems of prior art switching mechanisms for "switching light out of a supply waveguide into the desire row waveguide" (col. 4, lines 9-12). Thus, it is clear that the intended purpose of the cited text is for switching mechanisms for use display applications. However, modifying the cited discloses as suggested in the Office Action would render the switching mechanisms unusable for display application. "Permanently modifying" would render the switching mechanisms unable to switch. Thus, the proposed modification is improper according to M.P.E.P. § 2143 for rendering the cited disclosures unsatisfactory for their intended purposes.

Claims 2-15 are dependent from claim 1 and, thus, are patentable over Brinkman for at least the same reasons that claim 1 is patentable over Brinkman.

Independent claim 16 includes recitations similar to the "permanently modifying" recitation of claim 1 discussed above. Therefore, independent claim 16, and dependent claims 17-35 are also patentable over Brinkman for at least the reasons that claim 1 is patentable over Brinkman.

#### NEW CLAIMS

New independent claim 52 includes recitations similar to the "permanently modifying" recitation of claim 1 discussed above. Therefore, independent claim 52, and dependent claims 53-55 are also patentable over Brinkman for at least the reasons that claim 1 is patentable over Brinkman.

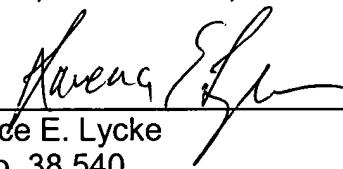
**CONCLUSION**

In light of the foregoing amendments and remarks, all pending claims are believed to be in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions or comments regarding this amendment, it is respectfully requested that the Examiner contact the undersigned at (206) 292-8600.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: Nov. 12, 2002

  
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

52. (New) A method comprising:

operating a laser device to produce an optical output signal having a free spectral range, the laser device having a resonant cavity and an intracavity waveguide segment having an effective refractive index;

determining the free spectral range of the optical output signal; and

responsive to the determined free spectral range, permanently modifying the effective refractive index of at least a portion of the intracavity waveguide segment so that the free spectral range substantially equals a predetermined value.

53. (New) The method of Claim 52 wherein permanently modifying the effective refractive index comprises illuminating the portion of the intracavity waveguide segment with a beam.

54. (New) The method of claim 53 wherein the beam comprises electromagnetic radiation selected to chemically alter the illuminated portion of the intracavity waveguide segment.

55. (New) The method of claim 54 wherein the portion of the intracavity waveguide segment comprises a polymer structure in which the electromagnetic radiation cause crosslinking.